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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/530,597  | 04/07/2005  | Massimo Covezzi      | FE 6057 (US)        | 6926             |
| 34872   | 7590        | 10/31/2007           | EXAMINER            |                  |
| BASELL USA INC.<br>INTELLECTUAL PROPERTY<br>912 APPLETON ROAD<br>ELKTON, MD 21921 |             |                      | TESKIN, FRED M      |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 1796  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 10/31/2007  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                 |                |
|------------------------------|-----------------|----------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s)   |
|                              | 10/530,597      | COVEZZI ET AL. |
|                              | Examiner        | Art Unit       |
|                              | Fred M. Teskin  | 1796           |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 August 2007.
- 2a) This action is FINAL.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-16, 18-21, 28 is/are allowed.
- 6) Claim(s) 17 and 22-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 April 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

Art Unit: 1796

Applicants' election with traverse of species I (as shown in Figure 1) and listing of claims 19-21 as readable thereon, in the reply filed on August 20, 2007, is acknowledged. No prior art having been found that anticipates or renders obvious the elected species, the prior art search has been expanded to the extent of determining patentability of the generic claims. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and applicants' traversal arguments deemed moot.

In view of the above-noted withdrawal of the restriction requirement as to the linked species, applicants are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Claims 17 and 22-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 provides the limitation to "the hydrogen content", which lacks proper and sufficient antecedent basis in the claims. (Cf., claim 16, line 1.)

Claims 22 and 25 (and claims dependent thereon) are internally inconsistent in reciting "said ... pipes" where precedent is provided only for the singular "pipe" (i.e. "at least one pipe"; see claim 22, lines 6 and 10 and claim 25, lines 11-12). It is suggested the term "pipe(s)" be substituted for "pipe" as a way of obviating this aspect of the rejection.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Govoni et al is cited to show analogous art, i.e., art relating to gas phase catalytic polymerization carried out in two interconnected polymerization zones, with mutual recirculation of polymer between the two zones and wherein polymer particles flow upward through the first polymerization zone under fast fluidization conditions and flow downward through the second polymerization zone under the action of gravity (note Figs. 1-4 and col. 4, ll. 18+).

Claims 1-28, as presently understood, are free of the prior art. Claims 1-16, 18-21 and 28 are allowable. Claims 17 and 22-27 would be allowable if amended or rewritten to overcome the rejection under 35 U.S.C. 112 set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: Claims 1-28 are allowable over the closest prior art of EP-574,821, cited in the International Search Report. The Report cites EP '821 as relevant to claims 1-3, 5 and

7-18. Process claim 1, however, requires that polymer particles formed in a first polymerization zone (where a fluidized bed is formed) leave said first polymerization zone to enter a second polymerization zone through which they flow downward, leave said second polymerization zone and enter a third polymerization zone through which they flow upward under fast fluidization or transport conditions, leave said third polymerization zone and are reintroduced into the first polymerization zone, thus establishing a circulation of polymer between the different polymerization zones.

EP '821 merely discloses a system of two reactors (fluidized bed or mechanically agitated) which operate at different polymerization conditions with mutual recirculation of polymer between the two reactors. As illustrated therein (e.g., Fig. 3.), polymer recirculation takes place via substantially vertical pipe (115), which has its top end located inside the fluidized bed of reactor (101) and its bottom end connected to transfer pipe (116), which in turn is connected to reactor (102). Polymer is pneumatically transported from reactor (102) to reactor (101) via pipe (125) and line (126). The three interconnected polymerization zones of the present invention are not disclosed nor adequately suggested in EP '821. In particular, the provision of three interconnected polymerization zones, with polymer being recirculated between the different zones and with the polymer particles flowing downward in the second polymerization zone and flowing upward under fast fluidization/transport conditions in the third, is neither taught nor adequately suggested therein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/10-26-07

  
FRED TESKIN  
PRIMARY EXAMINER  
